

General Definition of Work

Performs difficult professional work engineering work assisting with the management of construction projects, technical drafting, project inspection, research and design from concept to completion while providing on-the-job training to university engineering students and seasonal staff, and related work as apparent or assigned. Work is performed under the limited supervision of the Assistant County Engineer.

Qualification Requirements

To perform this job successfully, an individual must be able to perform each essential function satisfactorily. The requirements listed below are representative of the knowledge, skill, and/or ability required. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

Essential Functions

- 1) Designs road, bridge, culvert, and grading plans per IDOT specifications and determines project quantities.
- 2) Performs mapping and topographic work for project design and performs hydraulic calculations.
- 3) Assists with right-of-way determination/acquisition to include research, field work, drafting plats and writing legal descriptions.
- 4) Acts as project manager on construction projects by tracking contractor progress; compiles progress payments for work completed; maintains required records for state/federal agencies; coordinates project scheduling.
- 5) Coordinates and oversees seasonal staff/coop students in project inspection and checks required documentation.
- 6) Prepares plans for construction using CAD and related civil design software.
- 7) Helps maintain records of public land corner monuments and of previously completed construction projects.

Knowledge, Skills and Abilities

Thorough knowledge of engineering, road surveying and construction of road and bridge projects; thorough knowledge of engineering plans, specifications and drawings; ability to read and interpret plans, specifications and blueprints and compare them with various aspects of construction in progress; ability to operate standard office equipment and related hardware and software; ability to use standard engineering and drawing software; ability to learn specialized equipment and software depending on the needs of the agency; ability to prepare contracts and related documents; ability to maintain accurate records and prepare reports; ability to establish and maintain effective working relationships with associates, contractors or vendors and the general public.

Education and Experience

Bachelor's degree with coursework in Civil or Construction Engineering or related field and moderate experience, or equivalent combination of education and experience.

Special Requirements

Applicable position, department, organization and professional training will be provided and must be completed upon hire and on an ongoing basis.

Valid driver's license in the State of Iowa.

Physical Requirements

This work requires the frequent exertion of up to 25 pounds of force and occasional exertion of up to 50 pounds of force; work regularly requires sitting, using hands to finger, handle or feel and repetitive motions, frequently requires speaking or hearing, reaching with hands and arms, pushing or pulling and lifting and occasionally requires standing, walking and stooping, kneeling, crouching or crawling; no special vision is required; vocal communication is required for expressing or exchanging ideas by means of the spoken word; hearing is required to perceive information at normal spoken word levels; work requires preparing and analyzing written or computer data, use of measuring devices, operating machines and operating motor vehicles or equipment.

Environmental Conditions

This work occasionally requires exposure to wet, humid conditions (non-weather); work is generally in a moderately noisy location (e.g. business office, light traffic).

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